

CLAIMS

What is claimed is:

5 1. A method for efficient order processing in a manufacturing environment, the method comprising:

 utilizing a hierarchical definition language with run-time control capability to represent and control a box line manufacturing process of computer systems in a unified manner.

10 2. The method of claim 1 wherein utilizing further comprises providing a state file, the state file including blocks, sub-blocks, tasks, and containers for run-time information.

 3. The method of claim 2 further comprising providing a sequencer tool for interacting with the state file to direct tasks of the state file, monitor task completion, and update the state file
15 with real-time control information.

 4. The method of claim 3 further comprising providing a listener tool for interacting with the sequencer tool to start tasks, monitor tasks, and send task results to the sequencer tool.

20 5. The method of claim 4 further comprising defining a messaging protocol to support communication between the sequencer tool and the listener tool, the messaging protocol including unique identifiers and return codes for each task.

6. The method of claim 3 further comprising providing the sequencer tool on a local control station in the manufacturing environment.

7. The method of claim 6 further comprising providing the state file in an MTSN (machine-type-serial-number) directory of a local server coupled to the local control station.

8. The method of claim 6 further comprising providing the listener tool on at least a plurality of SUTs coupled to the local control station.

9. The method of claim 1 wherein utilizing further comprises providing a state file in XML.

10. A system for efficient order processing in a manufacturing environment, the system comprising:

a plurality of systems under test (SUTs);
at least one server networked to the plurality of SUTs; and
a local control system coupled to the plurality of SUTs and networked to the at least one server, wherein the at least one server and the local control system utilize a hierarchical definition language with run-time control capability to represent and control a manufacturing process for the plurality of SUTs in a unified manner.

11. The system of claim 10 wherein the at least one server further comprises a first level server, the first level server providing a state file, the state file including blocks, sub-blocks, tasks, and containers for run-time information.

5 12. The system of claim 11 wherein the local control system further comprises a sequencer tool for interacting with the state file to direct tasks of the state file, monitor task completion, and update the state file with real-time control information.

10 13. The system of claim 12 wherein at least the plurality of SUTs each further comprise a listener tool for interacting with the sequencer tool to start tasks, monitor tasks, and send task results to the sequencer tool.

15 14. The system of claim 12 wherein the sequencer tool and listener tool communicate through a messaging protocol, the messaging protocol including unique identifiers and return codes for each task.

 15. The system of claim 11 wherein the first level server provides the state file in an MTSN (machine-type-serial-number) directory.

20 16. The system of claim 11 wherein the first level server provides the state file in XML.

 17. A computer readable medium containing program instructions for efficient order processing in a manufacturing environment, the program instructions comprising:

providing a state file, the state file including blocks, sub-blocks, tasks, and containers for run-time information of a a box line manufacturing process of computer systems;

providing a sequencer tool for interacting with the state file to direct tasks of the state file, monitor task completion, and update the state file with real-time control information; and

5 providing a listener tool for interacting with the sequencer tool to start tasks, monitor tasks, and send task results to the sequencer tool.

18. The computer readable medium of claim 17 further comprising defining a messaging protocol to support communication between the sequencer tool and the listener tool, the
10 messaging protocol including unique identifiers and return codes for each task.

19. The computer readable medium of claim 17 wherein providing a state file further comprises providing a state file in XML.

15 20. The computer readable medium of claim 17 wherein providing a state file further comprises providing the state file in an MTSN (machine-type-serial-number) directory.